ABSTRACT

A navigation system with resume logic and mode logic provides as an output an accurate navigation solution using multiple RF sensors. The resume logic determines which sensors are currently providing good data to the navigation system. The mode logic selects an operating mode of the navigation system and selects which data to use for calculating corrections to the navigation solution. The mode logic makes the selections based on the results of the resume logic. The resume logic continues to test data from the sensors. If a sensor that has previously provided erroneous data starts providing good data, the mode logic will automatically select that data for use in calculating the corrections to the navigation solution. The tracking of RF transmitters by the multiple RF sensors is controlled using a plurality of available inertial and non-inertial sensors.